

## REMARKS

Claims 1-22 are pending and under consideration. Reconsideration is respectfully requested.

### I. REJECTION OF CLAIMS 1-22 UNDER 35 U.S.C. 112, FIRST PARAGRAPH:

The claims 1, 3, 17, 19, 20 and 22 have been amended for clarification, to overcome the rejections. Support for the claim amendments can be found at FIGS. 2 and 3 and pages 11-12 (beginning at line 17 on page 11 – line 9 of page 12) of the Specification.

### II. REJECTION OF CLAIMS 1-5, 8-11, 14 AND 17-22 UNDER 35 U.S.C. 103(a) AS BEING UNPATENTABLE OVER OKAMURA (JP07-199244)(previously cited) IN VIEW OF CHRAPLYVY (U.S. PATENT NO. 6,580,536)(previously cited):

Claim 1 recites “wherein output light power of said optical amplifying section is set based on said threshold value and insertion loss of optical parts arranged between an output end of said optical amplifying section, and an input end of the stimulated Brillouin scattering generating medium, and wherein said threshold value is variably set in accordance with the stimulated Brillouin scattering generating medium, and the insertion loss of the optical parts is added to said threshold value”. That is, in the present invention, the threshold value is variably set depending on the optical fiber utilized (i.e., SMF, DSF or DCF, etc.) and the insertion loss for the optical coupler and the optical isolator as shown in FIG. 3 is added to the threshold value, for example. Neither Okamura nor Chraplyvy, individually or combined, disclose this feature.

Okamura discloses a configuration for compensating for optical waveform degradation not only by generating a phase conjugate wave but by propagating the phase conjugate wave in the optical fiber cable 9 by the length that is to compensate for the waveform having been degraded by the optical fiber cable 2 (see paragraph [0002] of page 8 of the English translation of Okamura previously submitted by the Applicant).

Further, Okamura discloses that a signal intensity of 10dBm or above is necessary for generating the stimulated Brillouin scattering (see paragraph [0003] of page 8 in the English translation of Okamura previously submitted by the Applicant). That is, Okamura fails to disclose varying this value according to surrounding conditions of the scattering optical fiber cable 6 such as insertion loss of the branching section 5 as shown in FIG. 1 of Okamura.

Thus, the Applicant respectfully submits that the configuration of the present invention to eliminated the noise light component patentably distinguishes over the teachings of Okamura.

Further, Fig. 3 of Chraplyvy discloses output power level of optical signals received at an input of a receiver location, as measured using an optical spectrum analyzer (see column 2, lines 63-67). The received power spectrum has a pass-band type characteristic where the power level in a central passband region is within a predetermined db range. A noise level spectrum is such that at wavelengths beyond edges of the passband, and the noise level has not fallen off as fast as the signal level and as a result the signal-to-noise ratio has deteriorated for wavelengths in the regions below and above the passband (see column 3, lines 8-26). The Applicant respectfully submits that Chraplyvy is not related to "noise light elimination". Therefore, there is no motivation to combine these references.

Further, the combination of Okamura and Chraplyvy fails to establish a prima facie case of obviousness over the present invention.

Claims 3, 17, 19, 20 and 22 recite similar features as those of amended claim 1. Therefore, the above comments would be helpful in understanding differences of various other rejected claims over the cited references. Therefore, it is respectfully submitted that the rejection is overcome.

**III. REJECTION OF CLAIMS 6-7 AND 12 UNDER 35 U.S.C. 103(a) AS BEING UNPATENTABLE OVER OKAMURA IN VIEW OF CHRAPLYVY ET AL. AND FURTHER IN VIEW OF SUGAYA ET AL. (U.S. PATENT PUBLICATION NO. 2001/0017729):**

Claims 6, 7 and 12 depend from claim 3. Therefore, the comments mentioned above in section II may be applied here, where applicable.

**IV. REJECTION OF CLAIM 13 UNDER 35 U.S.C. 103(a) AS BEING UNPATENTABLE OVER OKAMURA IN VIEW OF CHRAPLYVY ET AL. AND FURTHER IN VIEW OF JOHNSON ET AL. (U.S. PATENT PUBLICATION NO. 2002/0131104):**

Claim 13 also depends from claim 3. Therefore, the comments mentioned above in section II may be applied here, where applicable.

**V. REJECTION OF CLAIM 15 UNDER 35 U.S.C. 103(a) AS BEING UNPATENTABLE OVER OKAMURA IN VIEW OF CHRAPLYVY ET AL. AND FURTHER IN VIEW OF KAI ET AL. (U.S. PATENT NO. 6,462,844):**

Claim 15 depends indirectly from claim 3. Therefore, the comments mentioned above in section II may be applied here, where applicable.

**VI. REJECTION OF CLAIM 16 UNDER 35 U.S.C. 103(a) AS BEING UNPATENTABLE OVER OKAMURA IN VIEW OF CHRAPLYVY ET AL. AND FURTHER IN VIEW OF KAI ET AL. AND FURTHER IN VIEW OF UETSUKA ET AL. (U.S. PATENT NO. 6,549,696):**

Claim 16 also depends indirectly from claim 3. Therefore, the comments mentioned above in section II may be applied here, where applicable.

**VII. CONCLUSION:**

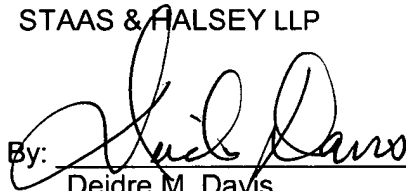
In view of the foregoing amendments and remarks, it is respectfully submitted that each of the claims patentably distinguishes over the prior art, and therefore, defines allowable subject matter. A prompt and favorable reconsideration of the rejection along with an indication of allowability of all pending claims are therefore respectfully requested.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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